

# Salmon Creek Watershed

## Description of the watershed

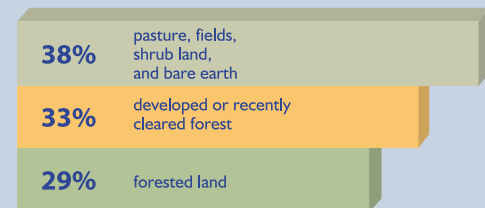
The Salmon Creek watershed is comprised of 89 square miles of rural, residential, commercial, forest, and industrial land. Located near the center of Clark County, the watershed extends from the Cascade foothills east of Hockinson, west to Lake River on the Columbia River flood plain. Salmon Creek flows 26 miles from forested headwaters on Elkhorn Mountain, through rural, agricultural, residential, and urban areas. The upper part of the watershed includes large-lot residential parcels and forested areas, and becomes increasingly urbanized as Salmon Creek nears I-5 and Vancouver. Most of the watershed is in unincorporated Clark County, but a significant part of the Woodin Creek subwatershed is in the city of Battle Ground.

Salmon Creek has five major tributaries: Mill Creek, Woodin Creek, Rock Creek, Morgan Creek, and Curtin Creek. There are many smaller creeks near Vancouver such as Cougar, Tenny, LaLonde, and Suds,

and many small, unnamed creeks in the rural areas. Battle Ground Lake and Kline Pond are the only lakes larger than five acres.

About 43 miles of streams in this watershed are accessible to salmon. Winter steelhead, coho, and coastal cutthroat trout use Salmon Creek, which is also widely used by Clark County residents for fishing, swimming, and other recreational uses. Parks at Kline Pond and Battle Ground Lake are heavily used for summer picnicking, swimming, and fishing. A system of trails provides access to the Salmon Creek Greenway between I-5 and Northwest 36<sup>th</sup> Avenue.

### Land uses in the Salmon Creek Watershed



A University of Washington study recently determined that land use in the Salmon Creek watershed is fairly evenly split between forested land, developed land or recently cleared forest, and pastures and fields. Recent research suggests that stream health begins to decline significantly once forestland is reduced to less than 65 percent of a watershed area.

## How healthy are Salmon Creek watershed streams?

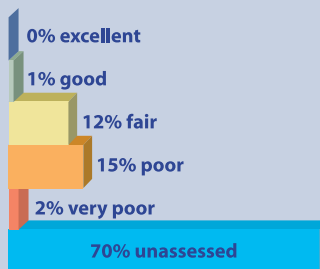
Stream health in this watershed ranges from good to very poor. It is best in the upland areas of relatively undisturbed forest, but declines markedly as streams flow through agricultural, rural residential, suburban, and urban areas.

The Salmon Creek watershed is probably the most intensively studied in Clark County. Monitoring data are available for approximately 30 percent of the watershed's stream channels that flow year-round. Most monitoring sites are tested for a combination of water chemistry, streambed life, and bacteria. This data generally agrees with what would be expected by looking at a map of land uses.

The state requires that Salmon Creek and its tributaries — Cougar, Mill, Curtin, and Woodin creeks — comply with state and federal total maximum daily load requirements (TMDLs). TMDLs attempt to limit the load or amount of a particular pollutant entering a water body. In Salmon Creek watershed, the targeted categories are harmful bacteria and turbidity (cloudiness of the water).

The following bar charts show the overall health ratings from four perspectives.

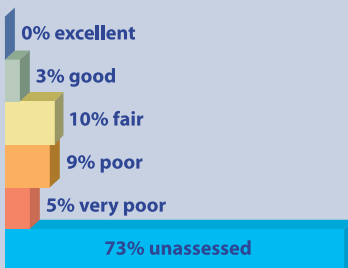
### Overall health



### Stream life health based on health of streambed creatures



### Health for recreational use based on presence of harmful bacteria



### General water quality based on temperature, pH, dissolved oxygen

